US-PAT-NO: 4654889

DOCUMENT-IDENTIFIER: US 4654889 A

TITLE: Multi-star fiber optic network with
improved access time

---------- KWIC ---------

Detailed Description Text - DETX (28):
    FIG. 5C illustrates an example of channel B data receiver
138 (FIG. 4B) when
amplitude modulation is employed to obtain the optical
channels. In FIG. 5C,
bandpass filter 150 receives signals from amplifier 136 (FIG.
4B). Filter 150
is tuned to pass the B frequency, such as 7 MHz. The output
of filter 150 is
provided to envelope detector 152 and thence to data
regenerator 154, such as a
comparator or Schmidt trigger. For channel C data receiver
140, filter 150
would be tuned to the C frequency, and for a channel A data
receiver it would
be tuned to the A frequency.

Detailed Descripti

US-PAT-NO: 5712716

DOCUMENT-IDENTIFIER: US 5712716 A

TITLE: Telecommunication system and method
for
                         wavelength-division multiplexing
transmissions with a
                         controlled separation of the outgoing
channels and
                         capable of determining the optical
signal/noise ratio

---------- KWIC ---------

Abstract Text - ABTX (1):
    A multi-wavelength optical telecommunication method
includes the steps of
generating at least one optical transmission signal in a
predetermined
wavelength band, transmitting the optical transmission signal
through an
optical fiber to a receiving station, receiving the optical
transmission signal
through a passband filter and filtering the signal to let the
transmission
signal alone pass. The wavelength band is scanned in order
to identify in the
band a recognizable portion of the optical spectrum being
received, thus
determining, based on the operating conditions corresponding
to said
recognizable spectrum portion, a search range of said
transmission signal
within which the transmission signal is searched out and
recognized based on
its spectral profile.

Brief Summary Text - BSTX (14):
    In one aspect, the present invention relates to a method
and an apparatus
for receiving transmission signals in a WDM system, in which
the passband of an

optical filter is continuously checked and adjusted by recognizing a sure
reference value in the scanned wavelength band and, based on this recognition,
the fine search range of the desired channel is detected, which range is
recognized based on its spectral profile in the absence of check signals
overlapped therewith.

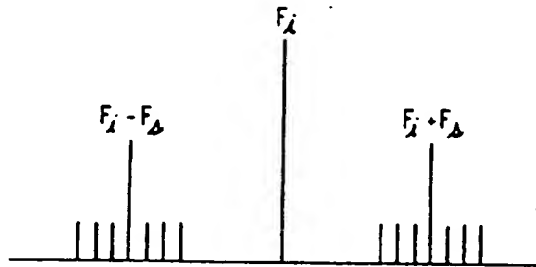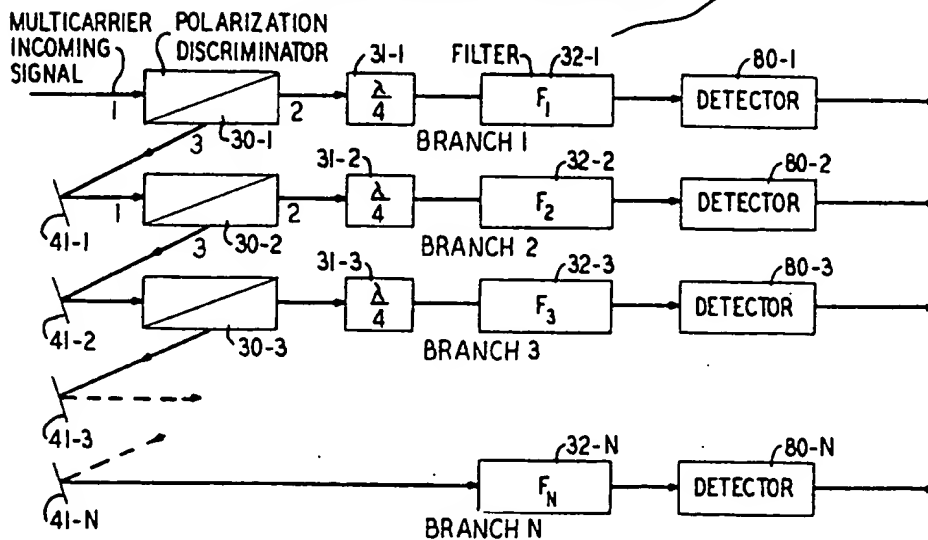| L Number	Hits	Search Text	DB	Time stamp
1	0	scan$4 near6 (band near4 wavwlength$3)	USPAT; US-PGPUB; EPO; JPO	2004/02/15 17:36
2	216	scan$4 near6 (band near4 wavelength$3)	USPAT; US-PGPUB; EPO; JPO	2004/02/15 17:36
3	15	(optic$3 near5 signal$2) same (scan$4 near6 (band near4 wavelength$3))	USPAT; US-PGPUB; EPO; JPO	2004/02/15 18:13
4	9	398/$.ccls. and (scan$4 near6 (band near4 wavelength$3))	USPAT; US-PGPUB; EPO; JPO	2004/02/15 18:14
5	2	(398/$.ccls. and (scan$4 near6 (band near4 wavelength$3))) not ((optic$3 near5 signal$2) same (scan$4 near6 (band near4 wavelength$3)))	USPAT; US-PGPUB; EPO; JPO	2004/02/15 17:56
6	26787	(bandpass adj filter$3)	USPAT; US-PGPUB; EPO; JPO	2004/02/15 18:44
8	6670	signals with ((bandpass adj filter$3))	USPAT; US-PGPUB; EPO; JPO	2004/02/15 18:15
9	860	(398/$.ccls. and ((bandpass adj filter$3))) and 398/$.ccls.	USPAT; US-PGPUB; EPO; JPO	2004/02/15 18:15
10	202	(bandpass adj filter$3) with node$2	USPAT; US-PGPUB; EPO; JPO	2004/02/15 18:16
11	21	398/$.ccls. and ((bandpass adj filter$3) with node$2)	USPAT; US-PGPUB; EPO; JPO	2004/02/15 18:16
7	860	398/$.ccls. and ((bandpass adj filter$3))	USPAT; US-PGPUB; EPO; JPO	2004/02/15 18:26
12	839	((398/$.ccls. and ((bandpass adj filter$3))) and 398/$.ccls.) not (398/$.ccls. and ((bandpass adj filter$3) with node$2))	USPAT; US-PGPUB; EPO; JPO	2004/02/15 18:34
13	252	(((398/$.ccls. and ((bandpass adj filter$3))) and 398/$.ccls.) not (398/$.ccls. and ((bandpass adj filter$3) with node$2))) and (frequenc$4 near6 detect$4)	USPAT; US-PGPUB; EPO; JPO	2004/02/15 19:10
14	66	(bandpass adj filter$3) with (double adj sideband$2)	USPAT; US-PGPUB; EPO; JPO	2004/02/15 18:44
16	44	((bandpass adj filter$3) with (double adj sideband$2)) and (frequenc$4 near6 detect$4)	USPAT; US-PGPUB; EPO; JPO	2004/02/15 18:46
17	1	(((bandpass adj filter$3) with (double adj sideband$2)) and (frequenc$4 near6 detect$4)) and (optic$3 near4 signal$2)	USPAT; US-PGPUB; EPO; JPO	2004/02/15 18:47
15	1	((((398/$.ccls. and ((bandpass adj filter$3))) and 398/$.ccls.) not (398/$.ccls. and ((bandpass adj filter$3) with node$2))) and (frequenc$4 near6 detect$4)) and ((bandpass adj filter$3) with (double adj sideband$2))	USPAT; US-PGPUB; EPO; JPO	2004/02/15 18:49
18	23395	tunable	USPAT; US-PGPUB; EPO; JPO	2004/02/15 19:11
19	19098	(tune$3 or tunable) with filter$3	USPAT; US-PGPUB; EPO; JPO	2004/02/15 19:11
20	82	((((398/$.ccls. and ((bandpass adj filter$3))) and 398/$.ccls.) not (398/$.ccls. and ((bandpass adj filter$3) with node$2))) and (frequenc$4 near6 detect$4)) and ((tune$3 or tunable) with filter$3)	USPAT; US-PGPUB; EPO; JPO	2004/02/15 19:11

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for
for
claim 1
2 & 3

FIG. 1

MULTIPLEX TRANSMISSION SYSTEM

FIG. 4
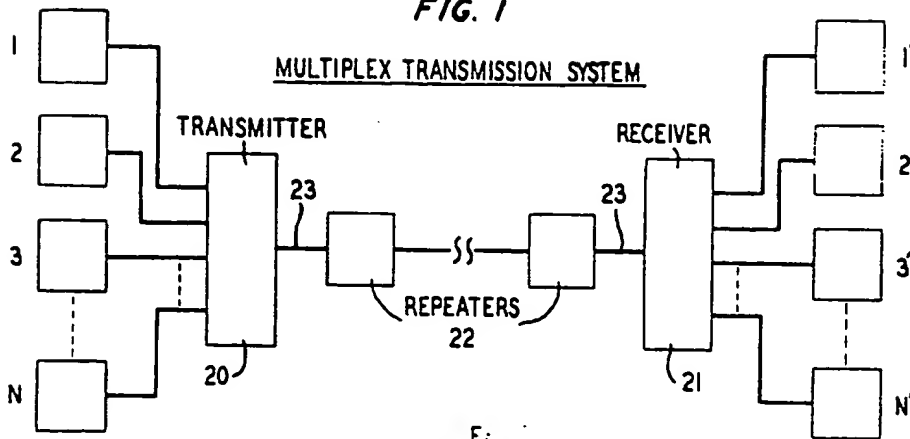
double
side band
filter

FIG. 5

FREQUENCY-DIVISION DEMULTIPLEXER

INVENTOR

O. E. DE LANGE

BY

Lyman Sherman

ATTORNEY

ndpass filter and
detector are included.

Detailed Description Text - DETX (29):
    In a single-sideband subcarrier system, **bandpass filters**
32 will be tuned to
one of the sidebands, $F.sub.i .+-. F.sub.s$, for the reasons
explained
hereinabove. In a double-sideband subcarrier system, filters
32 must be wide
enough to pass both subcarrier sidebands.

Detailed Description Text - DETX (30):
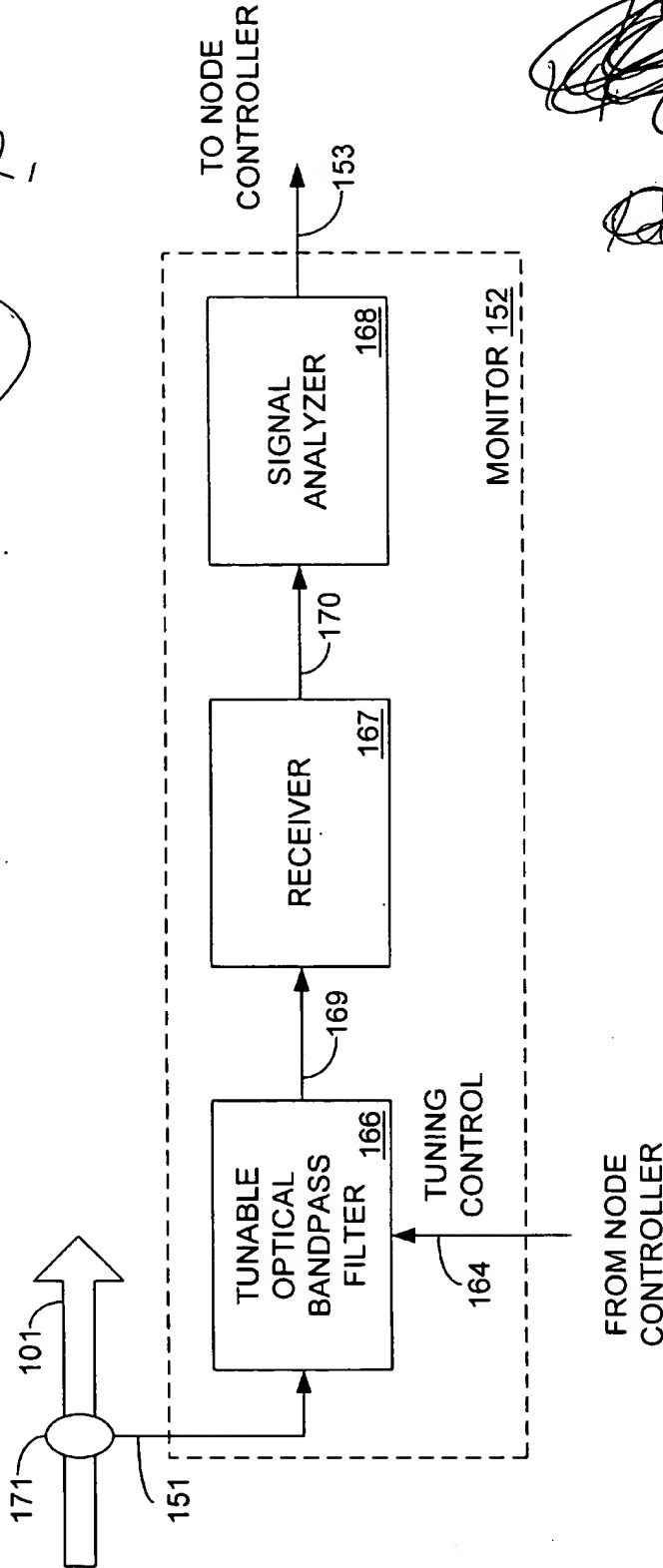   FIG. 6 shows an al

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102!

Claws 1, 2, 3, 12, 18

Node (171)

Note that since either it can be.
Note it's traced either TUBF.

TO NODE CONTROLLER

153

SIGNAL ANALYZER
168

MONITOR 152

170

RECEIVER
167

169

TUNABLE OPTICAL BANDPASS FILTER
166

TUNING CONTROL

164

FROM NODE CONTROLLER

101

171

151

Fig. 2

102

6587240

Detailed Description Text - DETX (20):
      FIG. 2 is a block diagram illustrating the monitor 152 of
FIG. 1.   When
commanded by the node controller 150 of FIG. 1, the monitor
152 analyzes the
optical signal chosen by node controller 150, and determines
whether this
optical signal requires regeneration or equalization.
Monitor 152 is connected
to input fiber 101 via tap 171 and connection 151.   Tap 171
removes a small
amount of light from fiber 107 and directs this light through
connection 151 to
tunable optical bandpass filter 166.   Tunable optical
bandpass filter 166 is
tuned by a tuning control signal 164 received from node
controller 150 over
connection 164.   The tuning control signal 164 may be
represented by an
electrical, optical, or a mechanical signal.   Tuning control
signal 164 directs
tunable optical bandpass filter 166 to pass one of the
optical signals present
on connection 151 to receiver 167 via connection 169 and to
block all others.
Tuning control signal 164 originates in node controller 150,
which determines
the wavelength of the optical signal that is to be passed by
filter 166, and
thus which optical signal is analyzed.   The single optical
signal output from
filter 166 passes to receiver 167 via connection 169, where
it is converted to
an electrical signal